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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Bowen-Leaver, et al.

Serial No.: 09/897,871

Group Art Unit: 1617

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Examiner: Yu, Gina C.

For: Ringing Nanogel Compositions

AmendmentsA. Specification

Please replace paragraphs 15 and 16, on pages 5 and 6 of the present specification with the following replacement paragraphs.

[00015] In particular, the nanogels of the present invention, upon application to the skin, undergo a breaking phenomenon whereby the complex viscosity of the nanogel breaks down (i.e., is drastically reduced) and releases a refreshing wet feel as it is rubbed onto the skin. As indicated by Figure [[1]]2, "Comparative Study of Viscoelastic Parameters", the ringing nanogel of the present invention has a rheological profile unlike that of a traditional gel prepared with a carbomer. The ringing nanogel of the present invention is characterized by two parameters, stiffness, G' (dyne/cm²), and viscous component G'' (dyne/cm²). The ringing nanogel of the present invention achieves a stiffness as measured by G' that is about an order of magnitude greater than the stiffness of a traditional gel made with carbopol. When oscillation stress (dyne/cm²) is greater than 2,000, the nanogel of the present invention undergoes a breaking phenomenon. The stiffness drops from a G' greater than about 100,000 to about 6,000 when the oscillation stress increases from about 2,000 to about 5,000. This phenomenon is also indicated by data in Figure [[2]]1, "Comparative Study of Complex Viscosity", wherein the complex viscosity (poise) of the ringing nanogel of the present invention is illustrated. The difference in complex viscosity, in the oscillation stress range of 2,000 to 5,000, is at least 15,000 poise, and preferably at least about 20,000 poise. The initial complex viscosity of the nanogel is at least about 15,000 poise. The ringing nanogel of the present invention has a viscous component, G'' (dyne/cm²) shown in Figure [[1]]2, about 5,000 under oscillation stress of about 1,000. Between oscillation stress of about 1,000 to about 3,500, the G'' increases from about 5,000 to about